

# Notice of Allowability

Application No.

10/771,573

Examiner

Paul W. Schlie

Applicant(s)

RAJAMANI ET AL.

Art Unit

2186

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an examiner initiated interview and resulting amendment dated 6/16/06.
2. ☒ The allowed claim(s) is/are 1-2, 6-23, 27-42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Kirk Wong on 6/16/06, whereby:

Claims 1, 22-23 and 27-42 are amended; and

Claims 3-5 and 24-26 are canceled; and

All remaining claims stand as original or most recently otherwise amended.

3. The application has been amended as follows:

1. (Amended) A method for managing memory used for query execution, the method comprising the computer-implemented steps of:

allocating a buffer map table with locations that correspond to a buffer pool in a cache memory;

wherein the cache memory is managed by a cache memory manager;

wherein the buffer map table is managed by a buffer pool manager that is distinct from said cache memory manager;

wherein the buffer pool includes a plurality of buffers;

in response to a need to ~~allocate space in said~~ cache a query working set of a query in the cache memory ~~for a query working set of a query~~, the buffer pool manager allocating to the query working set a buffer from the buffer map table that corresponds to a buffer in the buffer pool ~~to the query working set~~.

prior to generating said buffer map table,

calculating working set memory requirements of an average query;

generating an estimate of how many queries will be executing at a given time;

determining how many buffers within the buffer pool are required to  
accommodate the average query based on the estimate of how many  
queries will be executing at a given time;  
generating the buffer map table based on the working set requirements of the average  
query and the estimate of how many queries will be executing at a given time.

3-5. (Canceled)

Claim 6: replace "4" with --1--

Claim 22: after "computer-readable" insert --storage--

Claim 23: after "computer-readable" insert --storage--

24-26. (Canceled)

Claim 27: after "computer-readable" insert --storage--

Claim 28: after "computer-readable" insert --storage--

Claim 29: after "computer-readable" insert --storage--

Claim 30: after "computer-readable" insert --storage--

Claim 31: after "computer-readable" insert --storage--

Claim 32: after "computer-readable" insert --storage--

Claim 33: after "computer-readable" insert --storage--

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Claim 34: after “computer-readable” insert --storage--

Claim 35: after “computer-readable” insert --storage--

Claim 36: after “computer-readable” insert --storage--

Claim 37: after “computer-readable” insert --storage--

Claim 38: after “computer-readable” insert --storage--

Claim 39: after “computer-readable” insert --storage--

Claim 40: after “computer-readable” insert --storage--

Claim 41: after “computer-readable” insert --storage--

Claim 42: after “computer-readable” insert --storage--

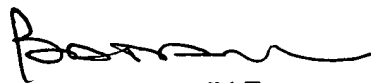
### ***Conclusion***

4. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul W. Schlie whose telephone number is 571-272-6765. The examiner can normally be reached on Mon-Thu 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 517-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PIERRE BATAILLE  
PRIMARY EXAMINER  
6/21/00